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Lebedeva, A.I. Electrolytic hydrogenation of diacetylenic glycols, 2021.

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Malina, Z.V., see Ardashev, V.I.

Malinovsky, M.S., and A.P. Grishchuk. Thermal decomposition of the calcium salts of monochloro- and trichlotoacetic acids. 1969.

Malyugina, N.I., see Korshunov, I.A.

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- Obolentsev, R.D., and students K.A. Vershinina and E.V. Skvortsova. Transformations of hydrocarbons with oxide catalysts. IV. Dehydrogenation of the butanes with a chrome catalyst, 1989.
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Petyunin, P.A., and L.S. Berdinsky. N-arylamides of hydroxycarboxylic acids and their conversion into heterocyclic compounds. V. Intramolecular condensation of aryl amides of benzilic acid. 1877.

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Petyunin, P.A., and L.S. Berdinsky. N-Arylamides of hydroxycarboxylic acids and their conversion into heterocyclic compounds. VII. Intramolecular condensation of the aryl amides of p.p-ditolylglycolic acid, 2063.

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- Pudovik, A.N. Acetylene-allene rearrangements. II.

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- Pudovik, A.N., and B.A. Arbuzov. The addition of dialkyl phosphorous acids to unsaturated compounds. I. Addition of dialkyl phosphorous acids to β,βdimethyl divinyl ketone, 423.
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Biological and Medical Chemistry. The action of aromatic diazo compounds upon alkylacetoxy esters as a method of synthesizing aryl hydrazones of a-keto acids, a-amino acids, and indole derivatives, 1851.

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- C₁₂H₁₂O₂N₂. x₁x-Dinitro-3-methoxy-5-tert, butyl-toluene, preparation, properties, 735.
- C₁₂H₁₂O₅N₄. Product of the reaction of diacetyl-diketopiperazine with glycine ester, 331, with methyl glycine, 333.
- C₁₂H₁₆N₂S. 2-(Diethylaminomethyl)-benzothiazole, synthesis, properties, 2303.
- CuH₁-ON 1) 5-Methoxypentenyl-2 aniline, preparation, 1805,
 - 2) (3 Methoxy-1-vinylpropyl)-aniline, preparation, 1805.
 - Nitrile of a -naphthoylformic acid, preparation. 764.
- CaH, Alp 1) Annilde of y, y-dimethyl-y-hydroxybutyric acid, preparation, properties, 1681,
 - N-Methylsalsoline, preparation, properties, derivatives 816.
- C₁₂H₁₉ON. Dimethylaminopropyl ester of benzyl alcohol, synthesis, properties, hydrochloride, 634.
- C₁₂H_{2x}ON, 1-isopropoxy-5-diethylaminopentene-3, preparation, properties, 1804.
- C12H2, O2Cl. Dissoamylchloracetal, preparation, 2423.
- C₁₂H₂₅O₅P. Ethyl a dissopropylphosphoisobutyrate, preparation, properties, 2450,
- C₁₈H₉₇NS. Dissoamylaminoethanethiol, preparation, properties, hydrochloride, 759.

12. IV

- C₁₂H₈O₅N₂S. 6-Nitrocarbazolsulfonic-3 acid, coordination compounds with chrome and cobalt, 537.
- C₁₁H₉O₅NS. 3-Carbazolsulfonic acid, coordination compounds with chrome and cobalt. 537,
- C₁₂H₁₀O₈N₂S₂. 5 (Acetanilnomethylene)-rhodanine, preparation, conversion to dyestuffs, 849.
- $C_{12}H_{12}ON_2S$. S Methyl-6-benzylthiouracil, synthesis, properties, 841
- C₁₂H₁₃ONS. 1) 2-(a-Acetyl)-ethylidene-3-methylbenzothiazoline, preparation, picrate, 174.
 - n-Butylbenzothiazolyl-(2) ketone, preparation properties derivatives 2474.
- $C_{12}H_{18}O_{Z}NS$. 2 Carbethoxy-3-methylbenzothiazine, salt, 169.
- $C_{12}H_{13}O_4N_9S_8$. Disulfan, polarographic investigation, 627.
- C₁₂H₁₄ON₂S. N-Morpholylbenzothiazolyl-(2)-methane, synthesis, properties, 2304,
- C₁₂H₁₄O₃N₂S. 2-Benzoylaminomethyl-4-carboxythiazolidine, properties 623,
- C₁₂H₁₅ONS. n-Butyl-[benzthiazolyl-(2)]-carbinol, preparation properties derivatives oxidation, 2473.
- C₁₁H₁₈O₂NCl. ar-1-Hydroxy-4-(aminoaceto)-tetralin hydrochloride, preparation, properties, 982.
- C₁₂H₁₀O₄N₂S. N^a Benzosulfolysine, (d and 1 forms), preparation properties 1246.
- C₁₂H₁₉O₄N₃S. N^a (p-Aminobenzosulfanil)-lysine, (d and 1 forms), preparation, properties, 1247.

C₁₂H₂₁ONS, 4-Methylisobornylxanthogenamide, preparation, properties, 835,

12, V

- C₁₂H₁₄O₂N₅SCl. Basic streptocides, polarographic investigation, 627,
- C_{2.2}H₁₈O₄NSC1. Methyl perchlorate of 2-ethyl-3methylbenzothiazine, synthesis, 174; condensation with p-dimethylaminobenzaldehyde, 187.

Group C13

13. I

- C14H18. Diphenylmethane, formation, 569.
- C₁₃H₁₄. Hydrocarbon, product of the action of phenylmagnesium bromide on dimethylvinylethynylchloromethane, 1604.
- C₁₃H₁₈. 1-Methyl-1-phenylcyclohexane, preparation, properties, derivatives, 953.
- C₁₃H₂₃. Product of the dehydration of tert.propylborneol, 829.
- C₁₉H₂₉. n-Tridecane, purification, physicochemical constants, 85; cryoscopic constants, transition temperature, 1341.

13. II

- C₁₃ H₉N. Acridine, reaction with bisulfites, 1885.
- C₁₃H₁₀O. Benzophenone, polarographic investigation, 1965; coordination compounds with AlBr₃, 1975.
- $C_{19}H_{11}N.$ 1) Benzaldehyde, reaction with maleic anhydride, 1645.
 - 2) 9,10-Dihydroacridine, preparation oxidation, 1885.
- C₁₃H₁₂O. 2-Methoxy-1-vinylnaphthalene, polymer, synthesis properties, 442
- C₁₃H_{L4}O. 1) 2,3-Dimethyl-5-phenylpentadiene-1,3-one, formation, properties, derivatives, oxidation, 2480.
 - 2) 3,3-Dimethyl-5-phenylpentene-4-one-2 (dimethylphenylacetylenylacetyl methane), formation, properties, oxidation, 2481.
 - 3) 2-Propoxynaphthalene, condensation with succinic anhydride, 647.
 - 4) Ethyl-a-naphthyldimethyl ether, 123.
- C₁₃H₁₄O₂ (2-Methoxy-1-naphthyl)-methylcarbinol. Preparation, properties, dehydration, 442.
- C₁₃H₁₆O₂. 1) Trimethylphenylacetylenyl ethylene glycol, (2,3-dimethyl-5-phenylpentene-4-diol-2,3), preparation, action of 30% sulfuric acid, 2479.
 - 2) 2,3-Dimethyl-5-phenylpentene-3-ol-2-one-5, formation, properties, 2481.
- C₁₃H_{1¢}N₄. Di-(2-pyridylmethylamino)-methylene, synthesis, properties, 2119.
- C₁₃H₁₈O. 4-(1-Methylcyclohexyl)-phenol, preparation, 956.

- C₁₃H₁₈O₄. 1) 4-Propoxyphenoxy-a-butyric acid, synthesis. 361.
 - 4-Isoamoxyphenoxyacetic acid, synthesis, 360.
- C₁₃H₁₉N. 1) Product of the action of acrylonitrile upon a- and β-pyronene, 2081, 2082.
 - 4-(1-Methylcyclohexyl)-aniline, preparation, properties, derivatives, 953.
- C₁₃H₂₀O. 1) 3-Methoxy-4-tert,-amyltoluene, synthesis, nitration, 2429.
 - Product of the reaction of acrolein upon α and β-pyronene, 2081.
- C₁₃H₂₆O₂. 2,3-Dimethyl-5-phenylpentanediol-3,4,preparation, properties, oxidation, 559.
- C₁₃H₂₆O₃. 1) 1-Methyl-4-isopropyl-4-carbethoxycylohexen-1-one-3, preparation, decarboxylation, 769.
 - Ethyl camphorcarboxylate-3, reaction with diazobenzene, 399.
- C₁₉H₁₂O. Tert-allylbornyl alcohol, preparation, properties, hydrogenation, 828.
- $C_{13}H_{29}N$. Amines, product of reduction of $C_{13}H_{19}N$, 2082
- C₁₈H₂₄O. 1) 4-Propylborneol, preparation, properties, 82.9
 - Tert.-Propylborneol, preparation, properties, dehydration, 828.
- C₁₃H₂₄N₂. N-Pseudoheliotridyl piperidine, preparation, properties, 2517,

13. III

- C₁₃H₂O₄N. β-(4-Nitronaphthyl-1)-acrylic acid, formation, 2435.
- C₁₈H₁₀O₃N₂, p-Carboxyphenylnicotinylamide, synthesis, properties, 1687,
- C₁₃H₁₆O₅N₄. 1) 4,4'-Dinitrophenylurea (4,4'-dinitrocarbanilide), preparation, 1421; hydrolysis, 2259; reaction with amines, 1155.
 - 2) 3,3'-Dinitrodiphenylurea, reaction with amines. 1155
- C₁₉H₁₂ON₂. Diphenylurea (carbanılide), hydrolysis, 1637; nitration, 1421; reaction with p-nitroaniline, 1155.
- C₁₃H₁₂O₅N₂. 1-(p-Nitrobenzoylhydroxymethylene)-2ethoxypropionitrile, synthesis, 2112,
- C₁₃H₁₅OBr 1) 2-(a-Bromopropionyl)-tetralin, preparation, reaction with benzyl amine, 2441.
 - β-(5-Methoxy-1-naphthyl)-ethyl bromide, preparation, 1353.
- C₁₃H₁₅O₄N. Ethyl ester of a-formylphenaceturic acid, preparation, properties, reduction 864.
- C₁₃H₁₆O₃N₂. Amide of ethoxymethylene-N-methylhippuric acid, preparation, properties, 152.
- C₁₃H₁₆N₃S. N-Piperidylbenzothiazolyl-(2)-methane, synthesis, properties, 2303.
- C₁₉H₁₇ON₃. Dimethylaminoantipyridine (pyramidone), spot reaction for cobalt, 531.

- $C_{13}H_{17}O_7N$. 1) ar-1-Hydroxy-4-(methylaminoaceto) tetralin, see hydrochloride, $C_{13}H_{12}O_7NCl$.
 - 2) 4-(1-Methylcyclohexyl)-nitrobenzene preparation, properties, 953.
- C₁₃H₁₇O₄N. Carbobenzoxy-d.l-norvaline, synthesis, transformations, 1622.
- C₁₈H₁₇O₆N. Ethyl methyl acetal of formylhippuric acid, preparation, 151.
- C₁₃H₁₈O₄N₂. 3-Diethylaminomethyl-5-nitrosaligenin methylene ether. Preparation, properties reduction, hydrochloride, comparison with Einhorn's "2-hydroxy-5-nitrobenzyldiethylamine" 584, 585.
- C₁₉H₁₈O₅N₈. 2,6-Dinitro-3-methoxy tert, -amyltoluene synthesis, odor, 2429.
- C₁₉H₁₉ON, 1'-(Tetralyl-2)-2'-(amino) propanol, preparation, properties, hydrochloride, 2441.
- C₁₃H₁₉O₃N. 6-Nitro-3-methoxy-4-tert, amyl-toluene preparation, properties, nitration 2429
- C₁₃H₁₉O₃P. Ethyl ester of a -methyl-w-phosphonostyrene, preparation, properties, saponification, 116.
- $C_{13}H_{20}ON_2$. dl-Valyldecarboxyphenylalanine synthesis, 1629.
- C₁₃H₂₀O₂N₂. 3-Diethylaminomethyl-5-aminosaligenin methylene ether, preparation, properties, hydrochloride, 586.
- C₁₃H₂₁O₂N. Acetylenic piperidol, 418.
- $C_{13}H_{21}O_3Cl.$ Isopropyl-(γ -chlorocrotyl)-acetoacetic ester, preparation, cyclization, 769.
- $C_{13}H_{25}O_2N$. Ethylpiperidol, product of the hydrogena tion of the piperidol $C_{13}H_{21}O_2N$, 419
- C₁₃H₂₇ON 1-Butoxy-5-chloropentene-3, preparation properties, 1804.
- C₁₃H₈₇O₅P. Ethyl a-diisobutylphosphopropionate, preparation, properties, 2450.

13. IV

- C₁₃H₁₆ONS, n-Amylbenzothiazolyl-(2)-ketone, preparation properties, derivatives, 2475
- C₁₃H₁₅O₂NHg. Meistylmercury succinimide, preparation, properties, 719.
- C₁₃H₁₇ONS. n-Amyl-[benzthiazolyl-(2)]-carbinol preparation, properties, derivatives, oxida tion, 2473.
- C₁₃H₁₇O₃NS. 2-Methylaminophenyl-a-mercaptoacetoacetic ester, synthesis, 175.
- C₁₃H₁₈O₂NCl. ar-1-Hydroxy-4-(methylaminoaceto)tetralin hydrochloride, preparation, properties,
- C₁₃H₁₈O₂N₂S. Phen ylhydrazone of the ethyl ester of y-methylmercapto-a-ketobutyric acid, prepara tion, properties, 1855.
- C₁₈H₁₉O₂NS. (1-Methylcyclohexyl)-benzenesulfamide. preparation, 954.
- C₁₃H₂₀O₄N₂S. N^a-(p-Toluenesulfo)-lysine, (d and 1

forms) preparation, properties, 1246.

13. V

C₁₃H₁₆O₃NSNa. Sulfite of sodium-acridinium, 1888.
C₁₃H₁₈O₆NSCl. Methyl perchlorate of 2-carbethoxy-3-methylbenzothiazine, synthesis, properties, 174, condensation with p-dimethylaminobenzaldehyde, 186

Group C14

14. I

C14H14. p.p-Ditolyl, preparation, 133.

C14H16. Butylnaphthalene, preparation, 754.

C14H20 1) Butyltetralin, preparation, 754.

(1-Methylcyclohexyl)-toluene, preparation 955.

C14H22 1.4 Di tert, butylbenzene, preparation, 568.

C14H24 Dimer of 3-ethylpentadiene-1,3, 1232.

C₁₄H₅₀. n-Tetradecane, purification, physicochemical constants, 85; cryoscopic constants, 1341.

14. II

- C14HeN2. 9-Cyanacridine, synthesis, 2131.
- C₁₄H₉Br. 9-Bromophenanthrene, preparation, reaction with phenyllithium, 1659.
- C₁₄H₁₁N. 1) Phenylindole, sulfonation, 1415.
 - 2) 2-Methylacridine, preparation, 1885,
- C₁₄H₁₂O. p-Tolylphenylketone, polarographic investigation, 1965
- $C_{14}H_{12}O_4$. β -(2-Hydroxynaphthoyl-6)-propionic acid, preparation, 647.
- C₁₄H₁₂O₆. Product of the acetylation of the oxide of 1,4-naphthoquinone, 182 7
- C₁₄H₁₈N. 2-Methyl-9 10-dihydroacridine preparation oxidation, 1885.
- C₁₄H₁₄Hg. 1) Dibenzylmercury, reaction with succinimide, 1483, photoreaction with organoiodine compounds, 2193,
 - Di-o-tolylmercury, reaction with succinimide, 1483.
- C₁₄H₁₅N. a \(\beta\)-Diphenylethylamine, synthesis, 871.
- C₁₄H₁₆O. 1) 1-Methyl-4-benzylcyclohexen-1-one-3 preparation, properties, oxidation, semicarbazone. 772.
 - 2) 2-Butoxynaphthalene, condensation with succinic anhydride, 649.
- C₁₄H₁₅O₃. 1) Lactone of [1-hydroxy-(5,6,7,8)-tetrahydronaphthyl-4]-hydroxybutyric acid, preparation, 139.
 - Benzoate of the β-hydroxy ethyl ether of dimethylacetenylcarbinol, preparation, properties, 1365.
- $C_{14}H_{16}O_4$. 1) β -[1-Hydroxy-(5,6,7,8)-tetrahydronaphthoyl-4] propionic acid, reduction, 139.
 - a·Benzylparaconic ester, preparation, properties, 396.

- C₁₄H₂₆O₄. 4-Butoxyphenoxy-α-butyric acid, synthesis, 361.
- C₁₄H₂₀N₂. Phenylpseudoheliotridylamine preparation, properties, dihydrochloride, 2517,
- C₁₄H₂₂O₃, 3,8-Diethyldecadiyne-4,6-diol-3,8, synthesis, properties 1233
- C₁₄H₂₂O₃. 1-Methy-4-n-butyl-4-carbethoxycylohexen-1-one-3 preparation, properties, decarboxylation, 771.
- C₁₄H₂₄N₂. 1) Piptantine, isolation, properties, derivatives, structure, 857.
 - 2) Piptamine, isolation, properties, derivatives, structure, 858.

- C₁₄H₈O₇S. Alizarinsulfonic acid, coordination compounds with chrome and cobalt, 539.
- C₁₄H₉O₂N. Betaine of 2-pyridine-3(1)-hydroxy-1,4 (3 4) naphthoquinone, preparation structure, properties, oxidation, 611, 612.
- C₁₄H₁₁ON. 1) 2-Methoxyacridine, preparation, 1885. 2) 1,8-o-Phenylene lepidone, preparation, 2224.
- C14H11NS. 3-Phenylbenzothiazine, salt, 169.
- $C_{14}H_{12}O_2N_2$. 1) 1,6-Dimethoxyphenazine, synthesis, 2266
 - 2) 1 8-Dimethoxyphenazine, synthesis, 2266
- C₁₄H₁₉O₂N. 1) a-Naphthalide of propionylformic acid, preparation, properties, 1675.
 - β-Naphthalide of propionylformic acid, preparation, properties, 1676.
 - N-Acetoacetyl carbazole, preparation,
 2223
- $C_{1a}H_{13}O_8N$. Product of the reaction of maleic anhydride and crotonylideneaniline, 1645.
- C₁₄H₁₃NS, 2-isopropyl a-naphthothiazole, synthesis, properties, transformations, 2309.
- C₁₄H₁₅ON. 1) a-(4-Hydroxyphenyl)-8-phenylethylamine, preparation methoxy derivatives, 873
 - 2) 2-(Methylaminopropionyl)-naphthalene, preparation, hydrochloride, hydrogenation, 2440
- C₁₄H₁₆O₂N. 1) a-Naphthalide of a-hydroxyisobutyric acid. preparation, 1674.
 - β-Naphthalide of a-hydroxyisobutyric acid, preparation, 1674.
- C₁₄H₁₇ON. 1'-(Naphthyl-2) 2'-(methylamino)-propanol, preparation hydrochloride properties, 2440.
- C₁₄H₁-O₄N. Ethoxymethylene hippurate, preparation, action of C₂H₅ONa, saponification, 150,
- C₁₄H₁₇NBr₂. symm, Amylbenzthiazolyl-2-ethylene, preparation, properties, 2474.
- C₁₄H₁₉ON. 1) 2-Methylaminopropionyl)-tetralin, preparation, properties, hydrochloride, 2436.

- 2) Pseudoheliotridyl phenyl ether, prep aration properties picrate, 2518.
- C₁₆H₁₉O₆8t 2 Bromo-4 butylphenoxy-a-butyric acid synthesis. 2398
- C₁₄H₁Ø₆N 1) Carbobenzoxy-d1-leucine, synthesis, transformations 1623
 - 2) Carbobenzoxy-dl-norleucine. synthesis, transformations 1623
- C₁₄H₁₀O₆N. Diethyl acetal of formylhippuric acid, formation 150 622.
- C₁₄H₅₀O₄N₅ Diethyl acetal of formylhippuramide preparation properties, 150
- C₁₄H₉₀N₇S. 2 (Dipropylaminomethyl)-benzothiazole. synthesis properties, 2303
- C₁₄H₀₁ON. 1) 2-(Methylaminopropanol) tetralin, preparation, hydrochloride, properties, 2436.
 - 2) Ethyl (5-methoxypentenyl-2) aniline. preparation properties 1805
- C₁₄H_{g,O2}N. Analyse of γ, γ-diethyl γ-hydroxybutyric acid preparation, properties 1682
- C₁₄H₂₂ON₂ 1) di Leucyldecarboxyphenylalanine, synthesis. 1630
 - 2) dl Norleucyldecarboxyphenylalanıne, synthesis. 1630
- C₁₄H₈₃O₃Cl. n Butyl-(y-chlorocrotyl)-acetoacetic ester, preparation, properties, cyclization, 770.
- C₁₄H₂₈O₈N₄ Di-exo-acetylglycinemethyl ester of 2,5dihydropyrazinamidine hydrate synthesis, prop erties, 333
- C₁₄H₂ ON Diethylaminopropyl ester of benzyl alcohol synthesis properties, hydrochloride, 633.
- C₁₄H₂Φ₂P Ethyl α-diisobutylphosphoisobutyrate, preparation properties 2450

14. IV

- C₁₄H₂ONS. 1) Phenyl benzthiazolyl-2-ketone, preparation. properties derivatives, 2466
 - 2) Sulfur analog of the betaine of $C_{14}H_9O_2N$, 613
- C₁₄H₂O₄NS 4 Nitrophenylthiophthalide, synthesis, properties, oxidation reduction 1698
- C₁₄H₂O₂NS. 4 Nitrophenylsulfonephthalide, synthesis properties reduction, 1698
- C₁₄H₁₂ONS. Phenylbenzothiazolyl (2)-carbinol, preparation properties oxidation 2466
- C₁₄H₁₁O₂NS. 4-Aminophenylthiophthalide, synthesis, properties, 1698.
- C₁₄H₁₁O₃NS. 2-Phenylindolesulfonic-3 acid, synthesis, properties, 1415.
- C₁₄H₁₁O₄NS, 4-Aminophenylsulfonephthalide synthesis, properties 1698
- C₁₄H₁₁O₃NBr₈. Ethyl ester of 2,4-dibromo-1-naphthyloxamic acid 2059
- C₁₄H₁₂ON₂S₉, 5-(3' Ethylbenzothiazolinylidene-2'-ethylidene)-thiazolidinethion-2-one-4; preparation, properties 849

- C₁₄H₁₂ON₄Cl₂. 5' Chloropyridylamide of β (5-chloropyridyl 2)aminocrotonic acid preparation, properties 1253
- C₁₄H₁₂ON_aBr₂. 5' Bromopyridylamide of β-(5'bromopyridyl-2)aminocrotopic acid, prepara tion, properties, 1252
- C_MH₁₂O₈NBr. 1) Ethyl ester of 1-bromo-2 naphthyl oxamic acid 2059
 - 2) Ethyl ester of 4-bromo 1-naphthyloxamic acid. 2059
- C₁₄H₁₉O₄N₉S. 1) β-Phenylaminoethyl 2.4 dinitro phenyl sulfide, preparation, 761
 - 2) p-Benzenesulfoacetamide-nicotinylamide, synthesis properties 1687
- C₁₄H_MON₇S, p Aminophenacyl p' aminophenyl sulfide preparation properties 1814
- C₁₄H₁₇ONS, n Hexylbenzothiazolyl-2 ketone preparation, properties, derivatives 2475
- C₁₄H₁-O₂NCl. at-1-Hydroxy 4 (methylaminoaceto) tetralin hydrochloride preparation 980
- C₁₄H₁₇O₆NS. p Acetaminophenacyl (ethyl glycolate) sulfide, synthesis properties oxidation 1812.
- C₁₄H₂O₅NS, p-Acetaminophenacyl (ethyl glycolate)sulfide preparation properties 1812
- C₁₄H₁ONS n-Hexvl-[benzthiazolyl-(2)] carbinol preparation, properties derivatives 2473
- C₁₄H₁₉O₄NS. 4 Nitrophenylthiophthalide synthesis, properties oxidation reduction 1697

14 V

- C₁₄H₁₂ON₄ClBr. 5*-Bromopyridylamide of β-(5 chloropyridyl 2)-aminocrotonic acid prepara tion, properties, 1253
- C₁₄H₁₂ON₄ClI. 5' Chloropyridylamide of β-(5iodopyridyl-2)-aminocrotonic acid. prepara tion, properties, 1253.
- $C_{14}H_{12}O_3NSNa$. Sulfite of sodium 2-methylactidinium 1890
- C₁₄H₁₂O₄NSNa Sulfite of sodium 2-methoxyacridin num 1891
- C₁₄H₁₉N₂O₂SNa. Sodium salt of 3-nitro 4-p toluene sulfaminoanisole, preparation 972.
- C₁₄H₁₈O₅NSP. Ethyl ester of 4-phosphonomethyl·2 phenylthiazole preparation saponification 2077.

Group C14

15. I

- C₁₅H₁₂. 9-Methylphenanthrene synthesis, 1662 bromination, 1663
- C₁₆H_{1e} 9-Methyl 9',10-dihyroanthracene formation 741.
- C₁₆H₁₆, 1,2-Diphenylpropane formation 740, nitration 741
- C1: H10. Guaiazulene, formation, derivatives 2326
- C15H24. 1) Trisopropylbenzene preparation. 566.

- 2) Ledene, hydrogenation, 2322, oxidation, 2327
- 3) Leddiene, hydrogenation, 2322, dehydrogenation, 2327
- C₁₆H₂₀. 1) Dihydroledene, preparation, properties, 2321.
 - Dihydroleddiene, preparation, properties, 322.
- C15H2a Tetrahydroleddiene, preparation, properties, 2322.
- C₁₈H₃₂, n-Pentadecane, purification, physicochemical constants, 85 cryoscopic constants, transition temperature, 1341

15. II

- C₁FH₁₀O₂. Phenanthrene-9-carboxylic acid, preparation 1659.
- $C_1, H_{10} \stackrel{\text{N}_{?}}{\sim} 2$ Methyl-9-cyanacridine, synthesis, properties, 2134
- C₁₆H₁₁Br. 9 Methyl-10-bromophenanthrene, synthesis, reaction with butyllithium, 1663, 1664.
- C₁₅H_{iB}O. 3-Hydroxy-6-methylphenanthrene, preparation, properties 1278
- C₁₈H₁₈Br. 1,1-Diphenyl-2-bromopropanol-1 formation oxidation 573. 574,
- C₁.H₁₄N Cinnamylideneaniline reaction with maleic anhydride. 1645
- C₁₅H₁₄O₃. 4-Benzylphenoxyacetic acid, synthesis, 2398
- C₁₄H₁₄O₄. Product of the acetylation of the oxide of 2-methyl-1.4-naphthogumone, 1828,
- C14H16O. 1) Di-p-tolylcarbinol, preparation, 133.
 - 2) Di-o-tolylcarbinol, preparation, 133.
 - 3) 3-Keto-6 methyl-1,2,3,9,10.11-hexa-
 - hydrophenanthrene preparation, properties, derivatives dehydrogenation, 1279,
 - 4) 1,1-Diphenylpropanol-1, bromination 575
- C₁₄H₁₆O₅ Lactone of [1-methoxy (5,6,7,8)-tetrahydronaphthyl] 4-hydroxybutyric acid. preparation, properties, 138
- C₁, H₁₀O₄ 1) 4, 7-Dihydroxy-6-hexylcoumarin, preparation, properties, 1895
 - 2) B-[1 Methoxy-(5,6,7,8)-tetrahydronaphthoyl-4]-propionic acid, reduction, 138
- C_{1F}H₁₀O₂. Acetic ester of 4(1-Methylcyclohexyl) phenol, properties, 956
- C₁₅H₂₆N₄. Di-(2-dimethylamino-5-pyridyl)-methane, synthesis. 2119.
- C₁₅H₂₂O₄. 4-Isoamoxyphenoxy-a-butyric acid, preparation properties, 361.
- C_{1F}H₂₄O. Isoamyl-2.4,6-trimethylbenzyl ether, preparation, properties 124.
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- C11H202 Ledglycol. preparation, properties, transformation, oxidation, 2328
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- C₁₅H₁,O₂N₃. 4-Renzeneazo-2-phenyl-5-oxyoxazole, synthesis cleavage with ammonia, 168.
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- $C_{15}H_{18}ON$. 1) γ -Keto- γ -(2-ammophenyl)- α -phenyl-propylene. preparation, properties, 878.
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- C₁₆H₁₉O₂Cl. α-(3-Chlorocrotyl)-γ-(p-tolyl)-butyric acid, preparation, properties, hydrolysis, cyclization, 1278.
- C₁₆H₁₉O₉N. 2-Oxo-4-amino-6-hexyl-7-hydroxychroman, preparation, properties, 1895.
- C₁₅H₁₉O₄N. Ethoxymethylene-N-methyl hippurate, preparation, properties, 152, saponification, reaction with alcohol elements, 152, 153.
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- C₁₅H₈₅O₃Cl. Isoamyl-(y-chlorocrotyl)-acetoacetic ester, preparation, properties, cyclization, 771.
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- C₁₅H₉O₃NCl₂. 2-Chloro-2-pyridine-1,2,3,4-tetrahydronaphthalene-1,3,4-trione chloride, hydrolytic cleavage, 611
- $C_{15}H_{11}O_{2}NS$. 2-Benzoylhydroxymethylbenzothiazole, synthesis, properties, methiodide, 2300.
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 - 2) Oxime of γ -keto- γ -phenyl- α -(2-chlorophenyl)-propane, preparation, 875,
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 - 2) Cinnamylidene in toluidine, reaction with maleic anhydride 1647
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- C₁₆H₁₇O₈. Benzoyl derivatives of methyl-p-toluylcarbunol. preparation, properties, 750.
- $C_{10}H_{20}O_2$. 1) 1-Phenyl-1-p-tolylpropanediol-1,2, formation, 2088.
 - 1-Phenyl-1-tolylpropanediol-1,2 formation 2087
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- C₁₆H₂₆O₂. Lactone of [1-ethoxy (5,6,7,8)-tetrahydronaphthyl 4]-hydroxybutyric acid, synthesis, properties, 137
- C₁₅H₂₀O₄ 1) β-{1·Ethoxy-(5,6,7,8)-tetrahydronaphthoyl-4] hydroxybutyric acid, reduction, 137.
 - 2) Phyl ester of 1-hydroxy-4-tetrahydro-naphthoylpropionic acid preparation 977.
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- C₁₆H_{8.}N₈. 2-Dimethylamino-5-pyridyl-(p-dimethyl-aminophenyl)-methane, synthesis, properties, derivatives 2119
- C₃:H₂₄N₈ Methylbenzylpseudoheliotridylamine preparation properties 2516.
- $C_{16}H_{2}\sqrt{Q_{2}}$. 1) Methyl ester of ledoic acid, preparation 2328
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- C₁, H₂, N₂ Octylpseudoheliotridylamine, preparation properties 2516

- C₁₈H₁₁O₂N 2-Phenyl-4-benzyliden-5-oxazolone, preparation properties reaction with amines, 1431.
- $C_{10}H_{12}ON_2$. 1) 2-Benzeneazo-1-naphthol, absorption spectrum, 1451.
 - 4-Benzeneazo-1-naphthol, absorption spectrum 1451.
- C₁, H_UO₇N₈ 1) 2-(o-Hydroxy) benzeneazo-1-naphthol absorption spectrum, 1451.
 - 2) 4-(p-Hydroxy)-benzeneazo-1-naphthol, absorption spectrum 1451
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- C₁₆H₁₃ON₉. 1) 2-Benzeneazo-1,5-aminonaphthol, absorption spectrum, 1451.
 - 2) 8-Benzenazo-1,5-aminonaphthol, absorption spectrum, 1451.
 - 3) 5-Benzeneazo-2,8-aminonaphthol, preparation properties 992.
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 - 2) 5-(p-Hydroxy)-benzeneazo-2,8-amino-naphthol. absorption spectrum, 1451.
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- C₁₄H₁₈O₁N. γ Keto-γ (2-aminophenyl)-α-(4-methoxyphenyl) propylene preparation, properties, 879
- C aH NS Diethylaminoethanethiol preparation, 759.
- $C_{\chi_0}H_{\chi_0}O_{\chi}N_{\chi}$. 1) Ethylidenedibenzamide, synthesis, structure, 1634
 - 2) 1,6-Diethoxyphenazine, synthesis, 2269.
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- $C_{16}H_{16}\Omega_4N_8$. Di-(m)-aniside of oxalic acid, synthesis, 2067
- C_{1x}H₁ O₂N Oxime of β -keto- α -phenyl- β -(2,5-dimethoxyphenyl) ethane, preparation, 873
- $C_{18}H_{17}O_8N_8$. m-Acetoaminodimethylaniline, synthesis, action of phosphorus pentasulfide, 2289.
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- C₁₅H₁₉O₂ \ 1) a (2.5-Dimethoxyphenyl)-8-phenylethylamine synthesis, 873.
 - 2) a B Di-(4-methoxyphenyl)-ethylamine, preparation derivatives 874.
 - 3) a-Naphthalide of diethylglycolic acid, preparation properties, 1674.
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- C₁₆H₁₉O₄Cl. β (p-Tolyl)-ethyl-(γ-chloro)crotyl-malonic acid preparation, decarboxylation, 1278.
- C₁₅H₁₉N₅S. 2 Dimethylamino-5-pyridyl-(p-dimethylaminophenyl) thione, synthesis, properties, 2119.
- C₁₆H₁₀ON₁. α-Phenyl-y-(4-methoxyphenyl)-y-(amino)-propylamine preparation properties, 877.
- C₁₆H₂₆O₃N₃. Piperidide of α-benzoylamino-β-hydroxycrotonic acid preparation properties, 1437.
- $C_{\lambda^{\alpha}}H_{R,0}N_{\rho}S_{\rho}$. α , α -Bis-(4-ammophenylthio)-butane synthesis properties, dihydrochloride, 1690.
- C16H81ON9. 2-Dimethylamino-5-pyridyl-(p-di-

- methylaminophenyl)-carbinol, synthesis, 2120.
- $C_{16}H_{27}O_2N$. Anilide of γ, γ -diallyl- γ -hydroxybutyric acid, preparation, properties, 1682.
- $C_{16}H_{83}O_2N$. ar-1-Hydroxy-4-(diethylaminoaceto)-tetralin, see hydrochloride, $C_{16}H_{84}O_2NCl$.
- C₁₆H₀₂O₈N. Diethylacetal of formyl hippurate, methylation, 145, preparation, 151; preparation, 622.
- C₁₆H₂₄O₁₂N₆ N, N'-exo-dimethoxyoxalyldihyrate-2,5-diglycylmethyl ester of dihydropyrazinamidine preparation, properties, 1021.
- C₁₆H₂₆ON₂. N-Acetylpiptantine, preparation, properties, 858
- C₁₆H₂O₆N₄ 2,5-Diethyl ester of glycyl-glycine dihydropyrazineamidine, hydrochloride, preparation, transformation, 319.
- C₁₆H₂₆O₆P₈. Ethyl ester of diphosphonostyrene, preparation, properties, saponification, 113.
- C₁₆H₂₈O₃N₄. Product of the reaction of diacetyldiketopiperazine with glycine ester, 330.
- $C_{16}H_{28}N_2S_a$. Thiuram, disulfide, of γ -ethyl-piperidine, preparation, properties, 1427.

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- C₁₆H₁₂O₄N₂S. 2-Benzeneazo-1-naphthol-4-sulfo acid, dissociation constant. 1165,
- C₁₆H₁₉O₄N₉S. 1) 1-Benzeneazo-2,8-aminonaphthol-5-sulfoacid, preparation, properties, 1265.
 - 2) 1-Benzeneazo-2,8-aminonaphthol-6-sulfo acid, synthesis, structure, transformation, 1263.
 - 3) 1-Benzeneazo-2,8-aminonaphthol-7-sulfo acid, preparation, properties, 1265.
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 - 2-Benzeneazo-1,5-aminonaphthol-6-sulfo acid, absorption spectrum, 1459; dissociation constants, 1165
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 - 7) 2-Benzeneazo-1,5-aminonaphthol-8-sulfo acid, absorption spectrum, 1459; dissociation constants, 1165
 - 8) 4-Benzeneazo-1,5-aminonaphthol-2-sulfo acid, absorption spectrum, 1458; dissociation constants, 1165
 - 9) 5-Benzeneazo-2,8-aminonaphthol-7-sulfo acid, preparation, properties, 1262.
 - 6-Benzeneazo-1,5-aminonaphthol-7-sulfo acid, absorption spectrum, 1458; dissociation constants, 1165.
 - 6-Benzene-azo-1,5-aminonaphthol-8-sulfo acid,
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 - 12) 7-Benzeneazo-2,8-aminonaphthol-5-sulfo acid, preparation, properties, 1263.

- 13) 7-Benzeneazo-2,8-aminonaphthol-6-sulfo acid, preparation, properties, 1263.
- 14) 8-Benzeneazo-1,5-aminonaphthol-2-sulfo acid, absorption spectrum, 1458; dissociation constants, 1165.
- 15) 8-Benzeneazo-1,5-aminonaphthol-4-sulfoacid, absorption spectrum, 1458: dissociation constants, 1165.
- 16) 8-Benzeneazo-1,5-aminonaphthol-6-sulfo acid, absorption spectrum, 1459, dissociation constants, 1165.
- C₁₆H₁₈O₆NS. 4-Nitrophenylthio-6,7-dimethoxyphthalide, synthesis, properties, oxidation, reduction, 1697.
- C₁₆H₁₃O₈NS. 4-Nitrophenylsulfone-6,7-dimethoxyphthalide: synthesis properties reduction, 1697.
- C₁₆H₁₄O₄N₈S. p-Acetaminophenacyl-p⁰-nitrophenyl-sulfide, preparation, properties, reduction, 1814.
- C₁₆H₁₆O₅N₂S. p-Acetaminophenacyl-p'-nitrophenyl sulfone, preparation, properties, reduction, 1814
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- C₁₆H₁₅O₆NS. 4-Aminophenylsulfone-6,7-dimethoxyphthalide, synthesis, properties, hydrochloride, 1697
- C₁₆H₁₆O₇N₈S. 1) 2-(Ethylaminomethyl)-benzothiazole, synthesis, properties, 2302
 - 2) 2-(Dimethylaminomethyl)-benzothiazole, synthesis, properties, 2302.
 - m-Thioacetaminodimethylaniline, preparation, reaction with potassium ferricyanide, 2289
- $C_{16}H_{16}O_2$ NC1. Hydrochloride of γ -keto- γ -(2-aminophenyl)- α -(4-methoxyphenyl)-propylene synthesis, 879.
- $C_{16}H_{16}O_2N_2S$, p-Acetaminophenacyl-p* aminophenyl sulfide, preparation, properties, 1814.
- C₁₆H₁₆O₄N₂S. p-Acetaminophenacyl-p°-aminophenyl-sulfone, preparation properties, reduction saponification, 1814.
- C₁₆H₁₆O₄N₂S₂. a,a,-Bis-(4-nitrophenylthio)-butane synthesis, properties, reduction, 1689.
- C₁₆H₁₇O₇N₈S. m-Thioacetaminodimethylaniline, preparation, reaction with potassium ferricyanide, 2290
- C₁₆H₂₈O₅N₂S. Ethyl ester of a-(4-carboxy-2-thiazolidy)-phenaceturic acid, preparation, 865.
- C₁₆H₂₂O₂N₄Cu. Copper salt of 2-butyryl ketone ketoxime, 295.
- C₁₆H₂₂O₁₆N₄Cl₂. N. N-exo-Dichloroxalyldihydrate-2,5-ethyldiglycine-dihydropyrazınamidine, for-mation, properties, transformation, 1019.
- C₁₆H₂₄O₂NCl. ar-1-Hydroxy-4-(diethylaminoaceto)tetralin hyrochloride, preparation, properties, 983.

- C₁₆H₂₆O₄NP. α-Diisopropylphosphopropion-p-toluide, preparation, properties, 2451.
- C₁₆H₂₈O₅N₄C₁₂. Hydrochloride of the 2,5-diethyl ester of glycyl glycine dihydropyrazinamidine, synthesis, properties, 319.
- C₁₆H_PO₉N₄C₁₈. di-exo-N-Chloroacetyl-glycine-ethyl ester of 2,5-dihydropyrazınamidine hydrate, synthesis, 336.

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- C₁-H₁₈ 2.7,9-Trumethyl-9°, 10-dihydroanthracene, formation properties, 742.
- C_{??}H₈₀ 2°.2° -Dimethyl-1,2-diphenylpropane, formation 743
- Cir.H. Benzylidenecamphane, dextrorotatory, preparation, properties, 830

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- $C_{17}H_{16}O$ 9-Methyl-10-8-hydroxyethylphenanthrene, synthesis. 1664
- C₁-H₁-N Cinnamylidene-m-xylidene reaction with maleic anhydride, 1647.
- C₁-H₁

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- 2) y (2-Propoxynaphthyl-6)-butyrolactone, preparation. 648
 - 3) Lactone of (2-propoxynaphthyl-6)-propionic acid. preparation. 136.
- C₁₇H₁₈O₄. B-(2-Propoxynaphthoyl-6)-propionic acid, synthesis, 647; reduction 136, 647; derivatives, 647.
- C₁₇H₂₆O₁. 1,3-Diphenylpentanediol-2,3, preparation, properties oxidation 560
- $C_{17}H_{20}O_3$. 1) γ -(2-Propoxynaphthyl-6)-butyric acid, preparation 648
 - 1-Methyl-4-benzyl-4-carbethoxycyclohexen-1-one-3, preparation properties, decarboxylation, 772.
- C₁₇H₂₂O₃. Lactone of [1-propoxy-(5,6,7,8)-tetrahydronaphth: yl-4]-hydroxybutyric acid, preparation, properties, 138.
- C₁₇H₂₂O₄. β-{1-Propoxy-(5,6,7,8)-tetrahydronaphthoyl-4}propionic acid, reduction, 136,
- C₁₇H₂₄O_c Tert.-Benzylbornyl alcohol, preparation, dehydration 829.
- $C_{17}H_{27}O_{3}$ Ethyl ester of ledoic acid, preparation, properties. 2328.
- C₁₇H₂₈O₄. 1) Ethyl ester of a-Hydroxyledoic acid, preparation, 2329.
 - 2) Ethyl ester of β -hydroxyledoic acid, preparation, 2330
- $C_{17}H_{34}N_2$. Methyloctylpseudoheliotridylamine, preparation, properties 2516,

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C₁₇H₁₁O₄N. 2-Benzoylamino-3-hydroxy-1,4-naphthoquinone, synthesis, derivatives, oxidative-hydrolytic transformation, 1137.

- $C_{17}H_{19}O_8N$. p-Nitrobenzyl ester of indanone-1carboxylic acid-3, preparation, 1140.
- C₁₇H₁₈O₈N. 2-Benzyl-4-benzyliden-5-oxazolone, preparation, properties, reaction with amines, 1431.
- $C_{17}H_{14}O_{2}N_{3}$. Analysis of α -acetylaminocinnamic acid, preparation, properties, 1431.
- C₁-H₁₀O₃Br₂, 4-Benzyl-2,6-dibromophenoxy-abutyric acid synthesis, 2400.
- C₁₇H₁₆O₄Cl₂. 4-Benzyl-2,6-dichlorophenoxy-abutyric acid, synthesis, 2400,
- C₁₇H₁₆O₃N₃. Methyl ester of α-benzoylamino-βphenylaminoacrylic acid. Preparation, properties, 1437
- C₁₇H₁₇ON, a (4-Methoxyphenyl)- γ (phenyl)-butyronitrile preparation, 877.
- $C_{17}H_{17}O_4N$. Benzoylhydrastinine, reaction with caustic alkalies, 353.
- C₁-H₁-O₃Br. 4-Benzyl-2-bromophenoxy-a-butyric acid. synthesis, 2400.
- C₁₇H₁₇O₃Cl 4-Benzyl-2-chlorophenoxy-a-butyric acid, synthesis, 2400.
- C₁₇H₁₈O₄N₈. Di-o-aniside of malonic acid, preparation, properties, 1681.
- $C_{17}H_{19}O_4N$. Oxime of β -(2-propoxynaphthoyl-6)-propionic acid, preparation, 648.
- C₁, H₁, NS 2-Hexyl-a-naphthothiazole, synthesis, properties, transformations, 2309.
- C₁₇H_{P0}O₄N_B. 1) (N-Butyl-N-hydroxyethyl)-amide of 4-nitro-1-naphthoic acid, preparation, properties, rearrangement, benzoyl derivative, 2434.
 - (N-Isobutyl-N-hydroxyethyl)-amide of 5nitro-1-naphthoic acid, preparation, properties, 2435
 - 3) Butylaminoethyl ester of 4-nitro-1-naphthoic acid, formation, rearrangement, 2433.
 - 4) Isobutylaminoethyl ester of 5-nitro-1naphthoic acid, formation, 2433.
- C₁₇H₁₁ON. 1) Dimethylaminoethyl ester of diphenylcarbinol, synthesis, properties, hydrochloride, 632.
 - β-(4-Methoxyphenyl)-δ-phenylbutylamine, preparation, 877.
- $C_{17}H_{11}O_3Cl$. Benzyl- γ -chlorocrotyl)-acetoacetic ester preparation, properties, cyclization, 772.
- C₁₇H₄₂O₃N₂ Piperidine of *a*-benzoyl-amino-8ethoxyacrylic acid, preparation, properties, 1438.
- $C_{17}H_{22}O_4N_2$. Phenylhydrazone of a-oxohomocamphoric acid, preparation, properties, 401.
- C₁₇H_{BB}ON. 2-(a)-Diethylaminopropionyl)-tetralin, preparation, hydrochloride, dehydrogenation, 2437.
- C₁₇H₂₈O₃N. Phenylpiperidol, synthesis, properties, acetate propionate, 419, 420
- C₁₇H₂₈O₅N. Diethylacetal of formylphenaceturic ester, preparation, 865.
- C17HarON. 1°-(Tetralyl-2)-2-(diethylamino)-propanol,

17. IV

- C₁₇H₁₂O₄N₂S. Anilide of 2-cyanacetylcoumarone-5-sulfo acid, preparation, 845
- C₁₇H₁₈ON₅S. Azo compound from 1-benzothiazolyl-3-methyl-5-pyrazolone, 2284.
- C₁₇H₁₇O₇N₈S. m-Thioaceto aminodimethylaniline, preparation, reaction with alkaline solution of potassium ferricyanide, 2289.
- C₁₇H₂₀O₅N₂S₄. Methyl-methyl sulfate of 2-methylmercapto-5-(3'-ethylbenzothiazolinylidene-2'ethylidene)-thiazolinone-4, preparation, properties, 850.
- C₁₇H₈₂ONCl. Hydrochloride of the dimethylaminoethyl ester of diphenylcarbinol (benadryl), preparation, properties, 632.
- C₁₇H₈O₄NP a-Dissobutylphosphopropionanilide, preparation, properties, 2451.

17. V

- C₁₇H₁₅O₄N₂SK. Product of the reaction of the potassium salt of the bisulfite compound of 2-methyl-1,4-naphthoguinone with phenylhydrazine, 2094.
- C₁₇H₁₅O₄N₂SNa. Product of the reaction of the sodium salt of the bisulfite compound of 2-methyl-1,4-naphthoquinone with phenylhydrazine, 2093.

Group 18.

18. I

- C₁₈H₁₂. 1,2-Benzanthacene action of phosphorous pentahalides, 2443.
- C₁₈H₃₈, n-Octadecane, purification, physicochemical constants, 85; cryscopic constants, 1341.

18. II

- C₁₈H₁₀Br₄. 9, 10, 10, x-Tetrabromo-9, 10-dihydro-1,2-benzanthracene, preparation, properties, 2446.
- C₁₈H₁₁Br. 10 Bromo-1,2-benzanthracene, preparation, properties 2443
- C₁₈H₁₁Br₃. 9, 10, 11-Tribromo-9,10-dihydro-1,2-benzanthracene, preparation, properties, debromination, 2443.
- C₁₈H₁₁Cl. 10-Chloro-1,2-benzanthracene, preparation, properties, 2445.
- C₁₈H₁₁Li. 1,2-Benzanthryllithium, preparation, transformation, 1395.
- $C_{18}H_{12}O_1$. 1) β -(2-Phenanthryl)- $\Delta^{d-\beta}$ -butenolide, synthesis, properties, 1905
 - 2) β -(3-Phenanthryl)- $\Delta^{a-\beta}$ -butenolide, synthesis, properties, 1905.
- C₁₈H₁₅Bi. Triphenylbismuth, synthesis, reaction with aluminum chloride, ferric chloride, 104, 106.

- C₁₈H₁₈Sb. Triphenylantimony, photoreactions with organoiodine, compounds, 2193 reaction with AlCl₂, 103.
- C₁₈H₁₉O₂. asymm. Dimethyldiphenylbutynediol, condensation with phenols, 593
- C₁₈H₂₆O₃. γ-(2-B toxynaphthyl)-6-butyrolactone, preparation, properties, 650.
- C₁₈H₂₆O₄. y-(2-Butoxynaphthoyl-6)-propionic acid, preparation, properties, saponification, derivatives, 649, 650.
- C₁₈H₂₂Hg. Dimesitylmercury, preparation, photoreaction, decomposition upon heating with silver, 717.
- C₁₈H₂₂O₃. y-(2-Butoxynaphthyl-6)-butyric acid, preparation, cleavage, 650.
- C₁₈H₂₄O₂. β-{1-Butoxy-(5,6,7,8)-tetrahydronaph-thoyl-4} hydroxybutyric acid, reduction,138.
- C₁₈H₂₆N₆. Di-2-pyridyl-(3'-diethylaminopropyl)guanide, 2123.
- C₁₈H₂₄O₃. Lactone of [1-but oxy-(5,6,7,8)-tetrahydronaphthyl-4]-hydroxybutyric acid_preparation, 138.
- C₁₈H₂₄O₄. β-[1-Butoxy-(5,6,7,8)-tetrahydronaphthyl-4]-hydroxybutyric acid, preparation, properties, 138
- C18H24O2. Oleic acid, polymerization, 1775
- C₁₈H₃₉S. Dinonyl sulfide, synthesis, properties, catalytic conversions, 268.
- C₁₈H₉₈S₂. Dinonyl disulfide, synthesis, properties, catalytic conversions, 269.

- C₁₈H₁₈O₁N₂. Anilide of a-Benzoylamino-β,β-dimethylacrylic acid, preparation, properties, 1434.
- C₁₈H₁₉O₂N. α, γ-Di-(4-methoxyphenyl)-butyronitrile, preparation, 876.
- C₁₈H₂₆O₂N₂. 1) Ethylidenediphenylacetamide, synthesis, structure, 1635.
 - 2) 1-[β-(3'-Pyridyl)-ethyl]-6,7-dimethoxy-3,4-dihydroisoquinoline, preparation properties reduction, hydrochloride, 1490.
- C₁₈H₁₁O₃N. a, β-Di-(4-methoxyphenyl)-ethylacetamine, preparation, 874.
- C₁₈H₈₁NS. 2-Heptyl-a-naphthothiazole, synthesis, properties, transformation, 2309
- C₁₈H₂₁O₃N. Oxime of β-(2-butoxynaphthoyl-6)propionic acid, preparation, 650.
- C₁₈H₂₂O₂N₂. 1-[8-(3*-Pyridyl)-ethyl]-6,7 dimethoxy-1,2,3,4-tetrahydroisoquinoline, synthesis, properties, hydrochloride, 1491.
- C₁₈H₂₂O₃N₂. β-(3,4-Dimethoxyphenyl)-ethyl-β-(3'-pyridyl)-propionamide, reaction with POCl₂, 1490.
- C₁₈H₂₅CN. Dimethylaminopropyl ester of diphenylcarbinol, synthesis, properties, hydrochloride, 633,

- C₁₈H₂₂O₂N. β.δ-Di-(4-methoxyphenyl)-butylamine, preparation, 876.
- C₁₉H₂₄N₂Cl₂ symm. Di-2-(5-chloropyridyl)-(3°-diethyl-aminopropylguanidine, 2121.
- C₁₈H₇-ON Di-(5-methoxypentenyl-2) aniline preparation 1805.
- C₁₀H₂₁O₄N₇. Heptapeptide leucyl-pentaglycyl-glycine, synthesis, spectrophotometry of biuret coordination compounds. 341.
- C₁₀H₃₀N_yS₄. Thiuram disulfide of y-isopropylpiperidine, preparation properties, 1428.
- C₁₉H₃, N₂S₆ Thiuram tetrasulfide of γ-isopropyl-piperidine preparation properties, 1428.

18. IV.

- $C_{18}H_{14}O_4N_7S$. p-Toluide of 2-cyanacetylcoumarone-5-sulfo acid, preparation 845.
- $C_{19}H_{24}O_5N_pS$. a (4-Carboxy-5,5-dimethyl-2-thiazolidyl)-phenaceturic ester, hydrochloride, 865.
- C₁₈H₃₀O₄NP a-Dissobutylphosphopropion-p-toluidide preparation properties, 2452,

18. V.

- C₁₈H₁₄O₉N₄S₃Na₂. Soluble streptocide, polarographic investigation, 627
- C₁₈H₁₇O₄N₂S₂Cl. (3-Methylbenzothiazole-2)-(4-methylbenzo-1, 4-thiazine-3)-monomethynecyanin perchlorate synthesis properties, 181
- C₁₈H₁₈O₆NSCl. Phenyl perchlorate of 2-carbethoxy-3-methylbenzothiazine, synthesis, 175.
- C₁₉H₁₉O₄N₂SC1. Methyl perchlorate of 2-(p-dimethylam-inobenzylidene)-benzo-1,4-thiazine, synthesis, properties, 187.
- C₁₃H₂₅O₆N₂SCl Hydrochloride of a-(4-carboxy-5,5-dimethyl-2-thiazolidyl)-phenaceturic ester preparation, 865.

Group 19.

19 I

- $C_{19}H_{16}$ 1) 9-Methyl-1,2-benzanthracene, bromination, 2445.
 - 2) 10-Methyl-1,2-benzanthracene, action of PBr_g , 2445.
- C19H16 Triphenylmethane formation, 569.
- C₁₉H₂₄. Dimesitylmethane, preparation, 126, 131, 132.
- C₁₉H₄₀, n-Nonadecane purification, physicochemical constants 85; cryoscopic constants, transition temperature 1341

19. II

- C₁₉H₉Br₉ 9,10,10-Tribromo-9,10-dihydro-1,2-benzanthracene preparation properties, 2446.
- C₁₉H₁₉Br. 9-Methyl-10-bromo-1,2-benzanthracene, preparation, 2443
- C₁₉H₁₆O. Triphenylcarbinol, synthesis, 1874.
- C₁₉H₁₉O₂. 3 Keto-7-methoxy-1,2,3,11, 12, 12a-hexahy-drochrysene, preparation, properties, dehydrogena-

- tion, 2,4-dinitrophenylhydrazone, 1353, 1354.
- C₁₉H₁₈O₉. ar-1-Benzoylhydroxy-4-acetotetralin, preparation, bromination 976.
- $C_{19}H_{22}O_4$. Ethyl ester of β -(2-propoxynaphthoyl-6)-propionic acid, synthesis, saponification, 648.
- C₁₉H₂₄O. Dimesitylcarbinol, preparation, 131.
- $C_{19}H_{74}O_3$ Ethyl ester of γ -(2-propoxynaphthyl-6)-butyric acid preparation, 648.
- C₁₉H₈, N_e symm D₁-2-pyridyl-(4°-diethylaminobutyl)-guanidine. 2123
- C₁₉ri₁₀O₈. Ethyl ester of acetylated a-hydroxyledoic acid. preparation. 2330.
- $C_{19}H_{46}O_2$. Methyl ester of oleic acid, polymerization, 1775.

19. III

- C₁₉H₁₈O₈N Product of the reaction of maleic anhydride and cinnamylideneaniline 1646.
- C₁₉H₁-O₉Br. ar-1-Benzoylhydroxy-4-bromacetotetralin, preparation, reaction with amines, 983
- C₁₉H₁₉O₂N ar-1-Benzoylhydroxy-4-(aminoaceto)tetralin, see hydrochloride, C₁₉H₁₉O₂NCl.
- C₁₈H₁₉O₆N. [2-8-(N-Methyl-N-benzoyl)-aminoethylpiperonyl alcohol, preparation properties, phenylurethane. 357
- $C_{19}H_{19}O_{\tau}N_{\pi}$ Dinitrophenylhydrazone of the ethyl ester of a-formylphenaceturic acid preparation, 862.
- $C_{19}H_{26}O_{2}N_{2}$. m-Diethylaminobenzylphthalimide, preparation properties, transformation, 1901.
- C₁₉H₂₁O₂N. ar-1-Hydroxy-4-(benzylaminoaceto)tetralin, see Hydrochloride, C₁₉H₂₂O₂NCl.
- C₁₉H₂₉O₂N β-(4-Methoxyphenyl)-δ-phenylbutylacetamine preparation, 877.
- C₁₉H₂₉NS 2-Octyl-a-naphthothiazole, synthesis properties transformation, 2309.
- C₁₉H₉₄O₈N₉. Ethyl ester of 3-benzeneazocamphocarboxylic-3 acid. Preparation properties, reaction with alcoholic alkali 401.
- C19H97O3N. Phenylpiperidol acetate preparation, 420.

19 IV

- C₁₉H₁₄O₅N₂S₂. Bis-(4-nitrophenylthio)-2*-hydroxybenzal, synthesis properties, reduction, 1690.
- C₁₉H₁₈ON₂S₂. Bis-(4-aminophenylthio)-2³-hydroxybenzal synthesis properties, dihydrochloride, 1691
- C₁₉H₂₀O₃NCl. ar-1-Benzoylhydroxy-4-(aminoaceto)-tetralin hydrochloride, preparation, properties, 982
- C₁₉H₂₂O₂NCl. ar-1-Hydroxy-4-(benzylaminoaceto)tetralin hydrochloride, preparation, properties, reduction 981
- C₁₉H₂₂O₅N₂S. N [€]-Benzoyl-N ^a-benzosulfolysine (d and <u>1</u> forms), preparation, properties, 1244.

19. V

C19H17O4N2S2C1. Product of reaction of methyl-

- perchlorate of benzo-1,4-thiazine with orthoformic ester. 181.
- C₁₉H₁₉O₄N₂S₂. Bis-(4-methylbenzo-1,4-thiazine-3)-monomethynecyanin perchlorate, synthesis, properties, 181.
- C₁₉H₂rO₄N₂SCl. Methyl perchlorate of 3-(p-dimethylaminostyryl)-benzothiazine, synthesis, properties, 187. Group 20

Group 2

20 I

- $C_{26}H_{14}$. 3,4°-Acc-1,2-benzanthracene, action of PCl₅, 2445.
- C26H10 9,10-Dimethyl-1,2-benzanthracene, preparation, 1401.
- C28H26. Symm.-Dimesitylethane, preparation, 124.
- C₂₈H₃₉. Product of the condensation of benzene with 1-methylcyclohexanol-1, 955.
- Casha. n-Eicosane, cryoscopic constant, 1343.

20. II

- C₂₀H₁₃Br. 10-Bromo-3,4'-ace-1,2-benzanthracene, preparation, properties, 2447.
- C₁₆H₁₃Cl. 10-Chloro-3,4°-ace-1,2-benzanthracene, preparation, properties, 2445.
- C₂₉H₁₄O₂. 9-Methyl-1,2-benzanthracene-10-carboxylic acid, preparation, properties, 1400.
- $C_{20}H_{14}Hg$. a- and β -Dinaphthylmercury, reaction with succinimide, 1403.
- $C_{20}H_{16}O$. 10- β -Oxethyl-1,2-benzanthracene, preparation,
- C₈₀H₁₈O₈. Product of the acetylation of the oxide of 2-phenyl-1,4-benzoquinone, 1827.
- C20H22O2 Benzoic ester of 4-(1-methylcyclohexyl)-phenol, properties, 956.
- $C_{20}H_{22}O_3$. Product of distillation of p-tolylacetyl carbinol, 749.
- $C_{20}H_{24}O_4$ Ethyl ester of β -(2-butoxynaphthoyl-6)-propionic acid, preparation, 649.
- C₂₈H₂₆O. 2,4,6,2°,4°,6°-Hexamethyl dibenzyl ether, preparation, 122.
- C₂₀H₂₆O₃. Ethyi ester of 2-butoxynaphthyl-6-butyric acid, preparation, 650.
- C₂₉H₂₅O₃. Lactone of [1-hexoxy-(5,6,7,8)-tetrahydro-naphthyl-4]-hydroxybutyric acid, preparation, 138, 139.
- C₂₀H₂₂O₄. β-[1-Hexoxy-(5,6,7,8)-tetrahydronaphthyl-4] hydroxybutyric acid, preparation, properties, 138.
- C₂₀H₃₀O₆. Adipate of the β-hydroxy ethyl ether of dimethylacetenylcarbinol, preparation, properties, 1366.
- C₂₀H₃₀N₆. symm. Di-2-pyridyl-(4°-diethylamino-1°-methylbutyl)-guanidine, 2122,
- C22H2S. Didecyl sulfide, synthesis, properties, 267.
- C₂₈H₄₂S₂. Didecyl disulfide, synthesis, properties, reduction, 265.

20. III

- C₂₀H₁₅ON. 3,3-Diphenyloxindole, synthesis, 1882.
- C₂₀H₁₇O₃N. Product of reaction of maleic anhydride with cunnamylidene-p-toluidine, 1646.

- C₈₈H₈₀N₄S₂. N, N'-Bis-[benzothiazolyl-(2)-methyl]piperazine, synthesis, properties, 2304.
- C20H21O3N. ar-1-Benzoylhydroxy-4-(methylaminoaceto)-tetralin, see hydrochloride, C20H22O3NCL
- C₂₆H₂₁O₄N. p-Nitrobenzoic ester of 4-(1-methyl-cyclohexyl)-phenol, properties, 956.
- C₂₀H₂₁O₅N. 3',4'-Dimethoxyphenyl-5,6-dimethoxy-3,4-dihydroisoquinolyl-(1) ketone, synthesis, iodmethylation, reduction, 1484.
- C₁₀H₂₁O₅Cl. β-(5-Methoxy-1-naphthyl)-ethyl-(3-chlorocrotyl) malonic acid, preparation, properties, 1353.
- C₂₈H₂₃ON. 2-(a-Benzylaminopropionyl)-tetralin, preparation, properties, reduction, hydrochloride, 2441.
- C₂₀H₂₅O₂N. ar-1-Hydroxy-4-(benzylmethylaminoaceto)-tetralin hydrochloride, see hydrochloride C₂₀H₂₄O₂NCl.
- C₂₀H₂₅O₃N. β , δ -D1-(4-methoxyphenyl)-acetamine, preparation, 877.
- C₂₆H₂₅O₅N. 8-(2,3-Dimethoxyphenyl)-ethyl-3°,4°-dimethoxyphenylacetamide, preparation, properties, reaction with POCl₂, 1483.
- C₂₀H₂₇ON. Diethylaminopropyl ester of diphenylcarbinol, preparation, properties, hydrochloride, 632.
- C₂₀H₂-O₄Cl. β-(p-Tolyl)-ethyl-(γ-chlorocrotyl)-malonic ester, preparation, properties, saponification, 1278.
- C₂₀H₂₃N₆Cl₂. symm.-Di-2-(5-chloropyridyl)-(4-diethylamino-1'-methylbutyl)-guanidine, 2124.
- C₂₆H₂₉O₃N. Phenylpiperidol propionate, preparation 420
- C₂₀H₃₂O₁₂N₄. N, N'-exo-Diethoxyoalyldihydrate-2,5-diglycylethyl ester of dihydropyrazinamidine, preparation, properties, 1019, 1021.
- C28H22N2S4. Thuram, disulfide of cis- and transdecahydroquinoline, preparation, properties, 1429.
- C₂₀H₃₂N₂S₃. Thiuram hexasulfide of cis- and transdecahydroquinoline, preparation, properties, 1429.
- $C_{28}H_{35}O_2N$. Antilde of γ, γ -diisoamyl- γ -hydroxy-butyric acid, preparation, properties, 1682.
- C₂₀H₂₄O₉N₃ Octapeptide leucylglycyl-glycine, synthesis, spectrophotometry, of bluret coordination compounds, 341.

20. IV

- C₂₀H₁₄ONBr. 3,3-Diphenyl-5-bromoxindole, preparation, properties, 1882.
- $C_{20}H_{10}O_{2}$ NBr. p-Bromanilide of benzilic acid, preparation, properties, 1881.
- C₂₈H₁₆O₆N₂S₂. Bis-(4-nitrophenylthio)-3'-methoxy-4'-hydroxybenzal, synthesis, properties, reduction, 1691.
- C₂₈H₂₈O₂N₂S₂. Bis-(4-aminophenylthio)-3'-methoxy-4'-hydroxybenzal, synthesis, properties, 1691.

- C₂₀H₂₇O₅Cl. β (5-Methoxy-1-naphthyl)-ethyl-(3-chlorocrotyl)-malonic acid, preparation, decarboxylation, 1353.
- C₇₀H₂₂O₃NCl ar-1-8enzoylhydroxy-4-(methylaminoaceto)tetralin hydrochloride, preparation, 979.
- C28H24O2NCl. ar-1-Hydroxy-4-(benzylmethylaminoaceto) tetralin hydrochloride, preparation, properties, 979.
- $C_{10}H_{24}O_{c}N_{F}S$ N ϵ -Benzoyl-N^a-p-toluenesulfolysine, (d) and 1 forms), preparation, properties, 1245.
- C₂₀H₂₅O₂NS. (1 Methoxycyclohexyl)-benzene sulfo-ptoluide preparation 955.

20 V

- CzoH, O. N. SzPa. Barium salt of 2b enzeneazo-pyrrolesulfonic-5 acid. 309
- C₁₀H₁O₄N₂S₂Cl. (4 Methylbenzo 1,4-thiazine-3) (3-methylbenzothiazole-2)-trimethynecyanin perchlorate, synthesis properties 183

Group Can

21. I

- Cg1H₁₀- 10-n-Propyl-1,2-benzanthracene, preparation, properties, 1399
- C., He. Di-3-cymylmethane preparation, 132.

21. II

- CgiHi,Og. Ethyl ester of 1,2-benzanthracene-10-carboxylic acid preparation properties, 1400.
- C₂₁H₁₆O. 9-Methyl-10-β-oxethyl-1,2-benzanthtacene, preparation, properties, 1401.
- C₂₁H₉₀O₈ Lactone of [1-heptyloxy-(5.6,7,8)-tetrahydro-naphthyl-4]-hydroxybutyric acid, preparation, 139.
- C₂₁H₃₀O₄. β-[1-Heptyloxy-(5,6,7,8)-tetrahydronaphthoyl-4]-propionic acid reduction 139
- C₂₁H_WO₂ Sapogenin patringenin preparation properties structure, 1055.

21. III

- C₈₁H₁₇ON. 1) 3,3-Diphenyl-5-methyloxindole, synthesis, properties, 1882.
 - 2) 3.3-Diphenyl-7-methoxyoxindole, preparation properties 1882.
 - 3) p-Toluidide of benzilic acid, preparation, 1880.
- C₂₁H₁₉O₃N, o-Antsidide of benzilic acid, synthesis, properties, 1881
- C₁₁H₂₁ON. 2-(a-Benzylmethylaminopropionyl)-naphthalene, synthesis hydrochloride dehydrogenation, 2440.
- C₂₁H₂₃O₆N. Colchicinic acid, preparation, properties, methyl and ethyl esters, 812.
- C₂₁H₂₅N₃S₂. Bis-(4-aminophenylthio)-4°-dimethyl-aminobenzal, synthesis, properties, 1692.
- $C_{g1}H_{g4}O_gN_g$. Aminocolchiceine, preparation, properties, 810,
- C₂₁H₂₅ON. 2-(a-Benzylmethylaminopropionyl)-tetralin preparation, hydrochloride reduction, 2439.
- C₂₁H₂₆ON₃. 6-Methoxy-8-(m-diethylaminobenzyl)-aminoquinoline, preparation, properties, dipicrate, 1901.

C₂₁H_{e7}O₄N. N-Methyl-1-(3',4'-dimethoxybenzyl)-5,6-dimethoxy-1,2,3,4-tetrahydroisoquinoline, preparation, properties, hydrochloride, 1484.

21. IV

- C₂. H₁ O₄N₂S₂ Bis (4-nitrophenylthio)-4°-dimethylaminobenzal, synthesis, properties, reduction, 1692.
- Cg1Hg3N4SgL 3.3°-Diethyl-6,6°-diaminothiacarbocyanin tod'de preparation, properties, 1467.
- C₁, H₄O₅NI. Methiodide of 3',4'-dimethoxyphenyl-5 6-dimethoxy-3.4-dihydroisoquinolyl-(1) ketone, preparation, properties, 1484.
- C₂₁H₂₆O₆N₃S. N[€]-Benzoyl-N^d-(p-acetylaminobenzosulfo)lysine (d and 1 forms), preparation, properties 1245.
- C₂₁H₂₅O₇N₃S. N [€] Benzoyl-N ^a -(p-carbomethoxybenzosulfo)-lysine (d and <u>1</u> forms), preparation, properties 1246.
- C₂, H₂, O₅ N₂ P Diisopropylphosphomalonanilide, preparation, properties, 2452.

21. V.

- C₂₁H₂₁O₄N₂S₂Cl. 1) Bis-(3-methylbenzothiazole-2)-8 10-dimethyltrimethynecyanin perchlorate, synthesis properties, 182.
 - Bis-(4-methylbenzo-1,4-thiazine-3)-trimethynecyanin perchlorate, synthesis, properties, 182
- C₂₁H₉•O₂N₂SL 2-[p-Dimethylamino-β-acetoxystyryl] benzothiazole ethiodide, synthesis, properties,
- C₈₁H₂₅O_aN₂SCI. Methyl perchlorate of 2-ethyl-3-(p-dimethylaminostyryl)-benzo-1,4-thiazine, synthesis properties, 187.

Group Car

22. I

C₂₇H₇₆ 10-n-Butyl-1,2-benzanthracene, preparation properties 1399

23. II

- C₂₃H₂₀N₂. 2,2°4,4°-Tetramethylbiquinoline, transformation to biquinophthalone 1475,
- $C_{22}H_{22}N_a$ Osazone of p-tolylacetylcarbinol, preparation, 749.
- $C_{22}H_{p,0}O_{2}$. o-Dicuminylbutynediol, synthesis, hydrogenation. 1610.
- C₂₂H₂₀O₂, o-Dicuminylbutenediol, preparation, properties. 1611.
- C₂₂H₂₆O₄. 1) Butyl ester of β-(2-butoxynaphoyl-6)propionic acid preparation 649
 - Cyclodimethyl lactolide of p-tolylacetylcarbinol and methyl-p-toluylcarbinol, preparation, 751.
- C₂₂H₃₄O₂. o-Dicuminylbutanediol, preparation, properties, 1611,

C₂₂H₁₇ON₅. 1) 1,5-Disbenzeneazo-2,8-aminonaphthol, absorption spectrum, 1457.

2) 5,7-Disbenzeneazo-2,8-aminonaphthol preparation, properties, 994.

C₂₂H₁₉O₂N₈. Anilide of α-benzoylaminocinnamic acid, preparation, properties, 1434.

C_{BF}H₁₉ON. 1) 3,3-D₁-(o)-tolyloxindole (o tolylisatin), preparation, properties, 2251.

2) 3,3-Di-(m)-tolybxindole (m-tolylisatin), synthesis properties, 2246.

 3,3-Di(p)-tolyloxindole (p-tolylisatin), preparation. 2069.

 $C_{22}H_{19}O_2N$, 3,3-Diphenyl-5-ethoxyoxindole, preparation properties, 1882.

C₂₂H₉ON₂ 3.3-Diphenyl 5-dimethylaminooxindole preparation, properties 1883.

C₂₂H₂(O₂N, 1) Annlide of o,o-ditolylglycolic acid synthesis, properties, 2250.

2) Anilide of m,m-ditolylglycolic acid preparation, properties, 2245

C₁₂H₈₁O₃N. p-Phenetidide of benzilic acid, synthesis, preparation, properties 1881.

 $C_{22}H_{22}O_2N_2$. p-Dimethylaminoanilide of benzilic acid, synthesis properties 1881.

C22H24O2N+ D1-exo-acetylbenzyl-2,5-dihydropytazinamidine, synthesis properties, 335

C₂₂H₈₅O₆N Methyl ester of colchicinic acid preparation properties, saponification, 812.

 $C_{22}H_{26}O_5N_2$ Methylaminocolchiceine preparation properties, 810.

C₂₂H₂NS. 2-Undecyl-a-naphthothiazole synthesis properties, transformation, 2309.

C₂₂H₃₁O₂N. 1) a-Naphthalide of disoamylglycolic acid preparation properties 1674.

2) 8-Naphthalide of dissamylglycolic acid, preparation, properites, 1675,

22. JV

C₂₂H₁₇O₄N₆S. 1) 1,5-Disbenzeneazo-2 8-aminonaphthoyl -7-sulfo acid, preparation, properties, 1255.

2) 1.7-Disbenzeneazo-2.8-aminonaphthoyl-5-sulfo acid, preparation, properties, 1265.

3) 2,6-Disbenzeneazo 1.5-aminonaphthoyl-8-sulfo acid, absorption spectrum, 1459

4) 2,8-Disbenzeneazo-1,5 aminonaph*hoyl-6-sulfo acid, absorption spectrum 1459

C₁₂H₁₆ONBr. 3,3-D₁-(p)-tolyl-5 bromoxindole preparation 2070

C₂₂H₂₀O₂NBr. p-Bromanilide of p p-ditolyl-glycolic acid preparation, 2068.

C₂₂H_{RF}N₄S₂L 3,3°-Diethyl9 methyl-6,6°-diaminothiacarbocyanin iodide preparation properties, 1469.

22. V

C12H18O4NSC1. Methyl perchlorate of 2-benzylidene-3-

phenylbenzo-1,4-thiazine, synthesis, properties. 188

C₁₂H₂O₄N₂SCl. (4-Methylbenzo-1,4-thiazine-3)-(1-methylquinoline-2)-trimethynecyanin perchlorate, synthesis properties, 183

C₁₁H₀O₆N₂S₂Cl. Methyl perchlorate of 2-carbethoxy-3-(p-dimethylaminostyryl) benzo-1 4-thiazine, synthesis properties 187

Group Cy

23 1

C2.144, 10-50amyl-1.2 benzanthracene preparation properties, 13.99.

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(A), O, N Azine derivative of 2 benzoylamino-3-hydroxy 1.4 naphthoquinone synthesis 1137

C23.11.No.55. No (p Dimethylaminophenyl)-imine bis (benzthiazolyl-2) ketone preparation properties hydrolysis, 2467

 $C_{29}H_{90}O_7N_5$. Anilide of a phenacylaminocinnamic acid preparation properties 1431

C_{2%}H₂,ON. 1) 3 3 D₁-(o)-tolyl-5-methyloxindole synthesis properties 2251

2) 3.3-D1 (p) tolyl-5 methyloxindole preparation 2069.

(7347,0, \(1) 3.3 D1-(m)-tolyl-7-methoxy-oxindole synthesis properties 2247

2) 3 3-D1 (p)-tolyl 7-methoxyoxindole preparation 2069.

C₂₉H_{P1}O₂N₉. Annilde of α-benzoylamino-β-phenylaminocrotonic acid preparation properties 1431.

C, 14, O, N₂, a Naphthyl isocyanate preparation properties 1793

C₁, H₂, O₂N 1) p-Toluidide of o o-divolylglycolic acid preparation properties 2250

2) p Toluidide of p p-ditolylglycolic acid 2068

C_{RR}H_{Re}O_RN, 1) o-Aniside of p p ditalylglycolic acid preparation, 2068

2) p-Toluide of p p-ditolylglycolic acid preparation 2068

3) m Aniside of p p-ditolylglycolic acid_preparation, 2009

4) o Anisidide of m,m ditolylglycolic acid, preparation properties 2246

C₁, U₁O₂N ar 1-Benzoylhydroxy 4 (diethylaminoaceto)-tetralin, see hydrochloride C₂₂H₂₃O₂NCl

C₃₃H₂D₆N. Ethyl ester of colchientic acid, preparation, properties saponification 813

23. IV

- C₂₉H₂₉Q₄N₃S. 2-p-Aminobenzoyl 2-p*-aminophenyl sulfone of 1-p*-dimethylaminophenyl ethylene, preparation, properties, 1815.
- C₁₉H₂ON₂Cl 2-Methoxy-5-chloro-9-(dimethylaminobenzy)aminoacridine, preparation, properties, dihydrochloride, 1902.
- $C_{gq}H_{gq}N_{g}S_{g}I_{g}$ 1) 3,3°-Dimethyl-7,7°-bis-(dimethylamino) thiacarbocyanine iodide, synthesis, properties 2290.
 - 2) 3.3°,9-Trimethyl-6,6°-diaminothiacarbocyanin iodide preparation, properties, 1469.
- C₂₃H_{2s}O₅NCl, ar-1-Benzoylhydroxy-4-(diethylaminoaceto)tetralin hydrochloride, preparation, saponification, 982.
- $C_{2k}H_{2l}O_5N_2P$, 1) Dissopropylphosphomalon-p-toluidide preparation properties, 2452.
 - Dissobutylphosphomalonanilide, preparation, properties. 2452

23 V

- C₁₉H₂₁O₉N₂S₂Cl. Bis-[3-methylbenzothiazole-(2)]-8:10diacetoxytrimethinecyanine perchlorate, synthesis, properties 2304
- C₂·H₂·O₂N₄S₂I. 3,3'-Diethyl-6,6'-di-(formylamino)thiacarbocyanin iodide preparation properties, 1469.
- C29H23O4N2S4Cl. Bis-(4-methylbenzo-1,4-th1azine-3)pentamethynecyanın perchlorate. synthesis, properties 183.
- C₂₉H₂₄ON₃SI. 3,1°-Diethyl-6-acetaminothia-4°-cyanin iodide preparation, properties, 1470.
- C₂₈H₂₇O₄N₄S₄Bt. 3,3'-Diethyl-6,6'-di-(methylsulfamino)-thracarbocyanin bromide, preparation, properties, 1468

Group C

24 11

- C₂₄H₂₂O₂, 1) 2 2-Dimethyl-5, 5-diphenyl-3-phenoxydihydrofuran-2,5, preparation, properties, 595.
 - 2) 2,2-Dimethyl-5,5-diphenyl-3-hydroxyphenyldihydrofuran-2,5, preparation, properties, 596
- $C_{24}H_{24}N_{2} = 2.2^{\circ}.4.4^{\circ}.8.8^{\circ}$ ·Hexamethylbiquinoline, synthesis, transformation to biquinophthalone, 1476.

24. III

- C₂₄H₁₄ON₂. 8-Hydroxy-1,2-naphthophenanthrene azine. synthesis, properties, 991,
- $C_{24}H_{17}ON$. 1) 3,3-Diphenyl-6,7-benzoxindole, preparation, properties, 1883,
 - 2) 3 3-Diphenyl-4,5-benzoxindole, preparation, properties 1883.
- C₂₄H₁₉O₂N. 1) a-Naphthalide of diphenylglycolic acid, preparation, properties, 1674.
 - β-Naphthalide of diphenylglycolic acid, preparation, properties, 1675.
- C₂₄H₂₃O₂N. 1) 3,3-Di-(o)-tolyl-5-ethoxyoxindole, preparation properties, 2251.
 - 3,3-Di-(m)-tolyl-5-ethoxyoxindole, synthesis, properties, 2247.

- 3, 3-Di-(p)-tolyl-5-ethoxyoxindole, preparation. 2070.
- C₂₄H₈₄O₂N₂. 2,2°,4,4°-Tetramethyl-8,8°-dimethoxybiquinoline, synthesis, transformation to biquinophthalone, 1476,
- C₂₄H₂₄O₅N₂. (N-Butyl-N-benzoyloxyethyl)-amide of 4-nitro-1-naphthoic acid, preparation, properties 2434
- C₂₄H₂₅O₃N. 1) p-Phenetidide of o,o-ditolylglycolic acid preparation properties, 2250,
 - 2) p-Phenetidide of m,m-ditolylglycolic acid, preparation properties, 2246.
 - 3) p-Phenetide of p,p-ditolylglycolic acid, preparation 2068.
- C₂₄H₂₅O₄N. Annlide of γ , γ -bis-(2-methoxyphenyl)- γ -hydroxybutyric acid_preparation_properties, 1682
- $C_{24}H_{24}O_7N_2$. Carbethoxycolchiceine, preparation, properties 812
- C₂₄H₂Q₅C1. β-(5-Methoxy-1-naphthyl)-ethyl-(3chlorocrotyl)-malonate preparation, saponification 1353

24 IV

- C₂₄H₁₅ONBr₂. Lactam of 1-amino-2,4-dibromonaphthyl (8)-diphenylacetic acid, synthesis, 2061
- C₂₄H₁₆ONBr. 1) 3,3-Diphenyl-7-bromo-5,6-benzoxindole, synthesis, 2061.
 - 3,3-Diphenyl-6-bromo-β-naphthoxindole,
 - 3) 3 3-Diphenyl-5-bromo-6, 7-benzoxindole, preparation, 2060
- C₂₄H₁-O₂NBr. 2,4-Dibromo-1-naphthalide of benzilic acid, 2060.
- C₂₄H₁₈O₂NBr. 1) 1-Bromo-2-naphthalide of benzilic acid, 2060.
 - 2) 4-Bromo-1-naphthalide of benzilic acid, 2000.

24 V

- C₂₄H₂₅O₄N₂SCl. Methylperchlorate of 2-{p-dimethylbenzylidene}-3-phenylbenzo-1.4-thiazine, preparation properties, 187
- C₂₄H₂₈O₂N₄S₂1. 3,3°-Diethyl-9-methyl-6,6°-di(formyl-amino)-thiacarbocyanin iodide, preparation, properties, 1469
- C₂₄H₂₉O₄N₄S₂Cl. 3,3°,9-Trimethyl-7,7°-bis-(dimethylamino)-thiacarbocyanine perchlorate, synthesis, properties 22.90.
- C₂₄H₂₉O₄N₄S₄Br. 3,3"-Diethyl-9-methyl-6,6"-di-(methylsulfamino) - thi acarboc yanın bromide, preparation properties, 1468.

Group C25

25. II

- C₂₅H₂₀N₂. Benzeneazotriphenylmethane, free radicals in decomposition reactions, 1219.
- C₂₅H₂₄O₇. Product of the acetylation of 3,3°-dimethoxybenzaurin, 1446.

25, III

- $C_{25}H_{22}O_2N_5$. Diethylaminocolchiceine, preparation, properties. 810.
- $C_{25}H_{41}O_7N$. Delsin, purification, properties, salts, structure, 195.

25. IV

- C₂₅H₂₃O₆N₉S. 2-p-Acetaminobenzoyl 2-p⁹-nitrophenyl sulfone of 1-p⁹-dimethylaminophenyl ethylene, preparation, properties, reduction, 1815.
- C₂₆H₂₅O₄N₃S. 2-p-Acetaminobenzoyl 2-p*-aminophenyl sulfone of 1-p*-dimethylaminophenyl ethylene, preparation, properties, saponification, 1815.
- C₂₅H₂₉ONS₂. 1) 1,2-Diphenyl-3,4-methylbornylimido xanthide, preparation, properties, 835.
 - 1,2-Diphenyl-3,4-methylisobornylimido xanthide, preparation, properties, 835.
- $C_{28}H_{35}O_{5}N_{2}P$. Diisobutylphosphomalon-p-toluidide, preparation, properties, 2452.

25. V

- C₂₅H₂₇O₂N₄S₂Br. 3,3°-Diethyl-6,6°-di-(acetamino)-thiacarbocyaninbromide, preparation, properties, 1468.
- C₂₅H₂₇O₂N₄S₂L 3,3°,9-Triethyl-6,6°-di(formylamino)thiacarbocyanin iodide, preparation, properties, 1469.
- C25H27O4N2SCl. Dye, synthesis, properties, 2310.
- C₂₅H₂O₄N₂S₂Cl. Bis-(2-ethyl-4-methyl-benzo-1,4thiazine-3)-trimethynecyanin perchlorate, synthesis, properties, 182.
- C₂₅H₃₁O₄N₄S₂Cl. 1) 3,3°-Dimethyl-9-ethyl-7,7°-bis-(dimethylamino)-thiacarbocyanine perchlorate, synthesis, properties, 2290.
 - 3,3°-Diethyl-7,7°-bis-(dimethylamino)-thiacarbocyanine perchlorate, synthesis, properties, 2290.
- C₂₅H₃₁O₄N₄S₄Rr. 3,3°,9-Triethyl-6,6°-di-(methylsulfamino)thiacarbocyanin bromide, preparation, properties, 1468.

Group Cas

26, II

- C26H16N2. 9,9°-Biacridine, synthesis, 659.
- C₂₆H₂₂O₇. 3,3°,3"-Trimethoxy-4°,4"-diacetoxyfuchsone, preparation, properties, 1844.
- C₂₆H₂₄O₈. 3,3°,3°-Trimethoxy-4°,4°-diacetoxy-4-hydroxytriphenylcarbinol, formation, 1845.
- C₂₆H₂₄Sn. Dibenzyldiphenyltin, synthesis, detachment of radicals. 1108.

26. III

CgeH₁₄N₂Cl₂. 3,3°-Dichloro-9,9°-biacridine, synthesis, properties, 659.

- C₂₆H₂ΩN. 1) 3,3-Di-(o)-tolyl-4,5-benzoxindole (3,3-di-(o)-tolyl-β-naphthoxindole), synthesis properties, 2251.
 - 3,3-Di-(o)-tolyl-6,7-benzoxindole (3,3-di-(o)-tolyl-a-naphthoxindole), synthesis, properties 2251.
 - 3) 3,3-Di-(m)-tolyl-4,5-benzoxindole, (3,3-di-(m)tolyl-β-naphthoxindole) synthesis, properties, 2247.
 - 4) 3,3-Di-(p)-tolyl-6,7-benzoxindole (3,3-di (p)-tolyl-a-naphthoxindole), preparation, 2070.
 - 3,3-Di-(p)-tolyl-4,5-benzoxindole (3,3-di-p-tolyl-β-naphthoxindole, synthesis, properties 2070.
- C₂₆H₂₃O₂N, 1) a-Naphthalide of p,p°-ditolylglycolic acid, preparation, properties, 1675.
 - 2) B-Naphthalide of m.m-ditolylglycolic acid, preparation, properties, 2246.
 - β-Naphthalide of o,o-ditolylglycolic acid, preparation properties, 2251.
 - 4) 8-Naphthaiide of p,p-ditolylglycolic acid, preparation, properties, 1676.
- C₂₆H₂₅O₃N, ar-1-Benzoylhydroxy-4-(benzylaminoaceto)-tetralin, see hydrochloride, C₂₆H₂₆O₃NC1.

26. IV

- C₂₆H₂₆O₃NCl. ar-1-Benzoylhydroxy-4-(benzylamino-aceto)-tetralin hydrochloride, preparation, properties, saponification, hydrogenation, 981.
- C₂₆H₃₂O₇NCl. Quinoid perchlorate of 2,2°-dimethyl-5,5°-ditert,-amyl-4,4°-dimethoxydiphenylhydroxylamine-N-oxide, 2430.

26. V

- C₂₆H₂₉O₂N₄S₂Br. 3,3°-Diethyl-9-methyl-6,6°-di-(acetamino)-thiacarbocyanin bromide, preparation, properties, 1468.
- C₂₆H₂₉O₄N₂SCl. Dye, synthesis, properties, 2310.
 C₂₆H₃₃O₄N₄S₂Cl. 3,3-Diethyl-9-methyl-7,7°-bis-(dimethylamino)-thiacarbocyanine perchlorate, synthesis, properties, 2290.

Group Car

27. II

- C₂₇H₁₈O. Biphenylene-9-phenanthrylcarbinol, preparation, 1663.
- $C_{27}H_{50}O_{5}$. Product of ozonation of the dimer of oleic acid, 1781.

- $$\begin{split} &C_{27}H_{17}ON_5, \quad 5,7\text{-}Disbenzeneazo-2,8-aminonaphthol,}\\ &synthesis, \ properties, \ 994. \end{split}$$
- C₂₇H₂₇O₃N. ar-1-Benzoylhydroxy-4-(benzylmethyl-aminoaceto)-tetrahydronaphthalene, hydrochloride, 978.

- C₂₇H₂₇O₆N₂SCl. Phenyl perchlorate of 2-carbethoxy-3-(p-dimethylaminostyryl)-benzo-1,4-thiazine, synthesis, properties, 188.
- C₂₇H₂₉O₈N₂S₂Cl. Bis-(2-carbethoxy-4-methylbenzo-1,4-thiazine-3)-trimethynecyanin perchlorate, synthesis, properties, 182.
- C₂₇H₃₁O₂N₄S₂Br. 3,3°,9-Triethyl-6,6°-di-(acetoamino)thiacarbocyanin bromide, preparation, properties, 1468
- C27H31O4N2SCl. Dye, synthesis, properties, 2310.
- C₂₇H₃₅O₄N₄S₂Cl. 3,3^r,9-Triethyl-7,7^t-bis-(dimethyl-amino)-thiacarbocyanine perchlorate, synthesis, properties, 2290.

Group Czs

28. II

- C₂₈H₂₀O. Biphenylene-9-methylphenanthryl-10carbinol, preparation, 1664.
- C28H20N2 Lucigenin, transformations, 653.
- C₂₈H₂₂N₂. N, N°-Dimethyl-9, 9°-biacridene, preparation, properties, 661.
- $C_{28}H_{24}N_2$. N. N°-Dimethylbiacridan, preparation, properties, 661.
- C₂₈H₂₈O₁₀. Product of the acetylation of 3,3°,3°-Trimethoxyaurin (rubrocol), 1448.

28. III

- C₂₈H₂₂ON₂. N.N*-Dimethyl-9,9*-biacridene oxide, preparation, properties, 660.
- $C_{28}H_{22}O_6N_4$ Lucigenin nitrate, preparation, properties, transformation, 660.
- $C_{28}H_{22}N_2Br_2$. Lucigenin bromide, synthesis, properties, transformation, 659.
- $C_{28}H_{30}O_5N_2$. Benzylaminocolchiceine, preparation, properties 811.
- C₂₈H₃₆O₁₀N₄. Product of the reaction of diacetyldiketopiperazine with methyltyrosine, 334.

28. IV

- C₂₂H₂₀N₂Cl₂Br₂. N, N'-Dimethyl-3, 3'-dichlorobiacridylium bromide, preparation, properties, 660.
- C₂₃H₃₄O₁₀N₄Cl₂. Di-exo-N-chloroacetyl-tyrosine-methyl ester of 2,5-dihydropyrazinamidine, synthesis, 337.

28. V

C28H33O4N2SCl. Dye, synthesis, properties, 2310.

Group C29

29. III

C₂₉H₃₀O₁₀N₄. Picrate of ar-1-benzoylhydroxy-4-(diethylaminoaceto)-tetralin, preparation, properties. 983.

29. V

C_{2.9}H₃₅O₄N₂SCl. Dye, synthesis, properties, 2310,

Group C₃₀ 30. I

C₃₀H₃₀. 1) Tetra-p-tolylethane, preparation, 133.

30. II

C₃₀H₄₂O₈. Cymarin, polarographic investigation, acid hydrolysis, 157.

Group C31

31. II

C₃₁H₃₆O₈. Methylene-bis-(4,7-dihydroxy-6-hexylcoumarin, preparation, properties, 1896.

31. III

C₃₁H₃₁O₈N₃. Guanido derivative of monoisopropylideneglucose, preparation, properties, 410.

31. V.

C₃₁H₂₅O₄N₂S₂Cl. Bis-(4-phenylbenzo-1,4-thiazine-3)-trimethynecyanin perchlorate, synthesis, properties, 182.

Group Cy

32. III

C₃₂H₄₆O₈N₂. Anthranoyldelsine, preparation, properties, derivatives, 1061.

Group C33

33. III

C₃₃H₃₁O₁₅N₉ Dipicrate of 6-methoxy-8-(m-diethylaminobenzyl)-aminoquinoline, preparation, 1901.

Group C34

34. IV

C₃₄H₃₆O₅N₄S₃. 3,3°-Diethyl-6,6°-di-(acetamino)thiacarbocyanin p-toluene-sulfonate, preparation, properties, 1470.

Group C36

36. II

- $C_{36}H_{56}O_{13}$. Periplocin, polarographic investigation, 158
- $C_{36}H_{68}O_4$. Dimer of oleic acid, preparation, properties, ozonation, 1780.

Group Car

37. III

C₃₇H₅₃O₁₀N₃. Delsemin, properties, purification, total alkaloids, saponification, 191.

Group C38

38. II

C₃₈H₇₂O₄. Dimer of methyl oleate, preparation, properties, saponification, 1779.

38. III

 $C_{38}H_{24}O_{4}N_{2}$. Biquinophthalone from tetramethylbiquinoline, synthesis, properties, 1477.

Group C40

40. III

- C₄₉H₂₈O₄N₂. Biquinophthalone from hexamethylbiquinoline, synthesis, properties, 1477.
- C₄₆H₂₃O₆N₂. Biquinophthalone from dimethyldimethoxybiquinoline, synthesis, properties, 1477.
- C₄₉H₄₀O₁₀N₄. Carbobenzoxy derivative of tyrosinamidine, 319.

Group C53

53. II

C₅₃H₅₅O₁₅. Saponin of the roots of Patrinia intermedia R et Schult, isolation, structure, hydrolysis, 1049.